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METHOD AND SYSTEM FOR PROVIDING SATELLITE BANDWIDTH ON DEMAND USING MULTI-LEVEL QUEUING

Abstract Of The Disclosure:

An approach for allocating bandwidth in a satellite communication system is disclosed. The system includes a set of global queues that store bandwidth requests, which are received from a number of satellite terminals. The received bandwidth request include a high priority rate request, a low priority rate request, a high priority volume request, and a low priority volume request. A bandwidth control processor determines bandwidth request type and priority of the received bandwidth requests and places the bandwidth requests in the appropriate global queues based upon the determined bandwidth request type and priority. Each of the global queues corresponds to a data rate associated with of each a plurality of channels. The system also utilizes a set of local queues that correspond to the channels. The BCP moves the bandwidth requests from the global queues to the local queues. The BCP then allocates the transmission slots in response to the bandwidth requests stored in the local queues.